N
135 and Liu-pa followed by Lüeh-yang, Tsu-nan, Chenan and Hsihsiang,
N
316 where primitive mining has been carried on by native methods. The
[433] total annual production is less than 2,000 tons.

In Kansu, iron ore is mined in the districts of Liang-tang,
N Hui-hsien, Cheng-hsien, Hsi-ku, Yung-tang, Tien-shui, and
[433] Wen-hsien. The total output is about 25,000 tons, while the total reserve of Kansu is said to amount to 12,600,000 metric tons.

Iron ore deposits have been reported in Chinghai, but no further data are available.

S In Sinkiang, iron deposits are distributed both in the northern
135 and southern parts of the province. The largest vein is the ore which occurs at Ali in Kucha with a reserve of nearly three million metric tons and a content of thirty percent. It is specularite ore. There is another specularite ore deposit in the hills west of Urumchi. It has a reserve of 750,000 metric tons with a content of twenty-five to forty percent. Other iron ore deposits are found at Pai-cheng, Chang-chi, Fu-yüan, and Ta-cheng. However, the vein of Khara Balgasun mountain
S near Turfan is historically the best known to the Chinese. The
316 iron mines at Kizil near Yarkand are also of high quality. Extensive iron beds are also reported at Yengi Hissar and in the Ili valley. At present, iron ore is mined mainly in Kashgar. Before World War II, there were some four or five smelting furnaces in operation with a yearly production of 150 tons or iron.
S Now, according to 1955 reports, in Urumchi a steel factory is
327 producing agricultural implements, etc. There is a factory
[398] for repairing automobiles, and one for producing machine
[392] tools. They are modest, but this does not mean that other factories, about which the press is silent, do not exist.

N With regard to the distribution of iron ore in Sinkiang and
S the northwest as a whole, the following two tables may be found
135 useful. (See Tables V and VI.)

b. Ferro alloys:

Tungsten, molybdenum, and nickel have been reported in the province of Sinkiang, and manganese in Kansu. With regard to their distribution and reserves very little information is available. Tungsten is produced at Chi-ka-tai, Ho-ssu-tai and Chu-li-kun, north of Wen-chuan-hsien in Sinkiang. A reserve of 8,600 metric tons is estimated for the three deposits; mechanized mining with Soviet equipment has started. Molybdenum is produced at Na-lu-kou and Pa-tu-lu-kou in Ching-ho-hsien. A total reserve of 2,000 metric tons for the former and 7,000 tons for the latter are estimated. The ore is reported to have a content of sixty-five percent $WO_3$. Manganese ore is found at Hsi-wan of Kan-ku Hsien and Shan-lan-men-shih of Yung-teng-hsien in Kansu. The former has a reserve of 200,000 metric tons with a content of 41.47 percent $MnO_2$ and the latter

1, [See p. 131--Analyst]

N
*175 year exceeded 2,000,000 catties, or some 2,600,000 pounds.
288 There were twenty-five factories in other cities in Shensi,
474 of which number thirteen were in Sian, nine in Pao-chi, and one each in San-yuan, Ta-li and Pai-shui. Their output was also not disclosed, but their annual consumption of raw wool was reported as 720,000 catties ching, much smaller than that in
N Yu-lin Besides, there were ten cooperatives in Sian and Pao-
[433] chi, which could produce 600,000 to 700,000 army blankets
N per year.

[471] In Ninghsia, there were five small factories with a total
[433] capital of CNC$230,000. They produced some CNC$1,200,000 worth of goods in 1941. All of them were using hand looms.

S In Sinkiang, there was one woolen factory in operation, but
[288] details are lacking. There is no report of woolen factories or cooperatives in Chinghai.

N 2. The cotton industry

*175 The development of cotton industry in the Northwest was
288 mainly stimulated by the Sino-Japanese War. Before 1937, there was not a single modern cotton factory in this area. But during the war, many factories had moved from the Japanese-occupied areas to Shensi, and many new ones were built there. In 1942, the total number of spindles exceeded 60,000, and the annual consumption of raw cotton was 130,000 piculs, about twelve percent of the total production of Shensi.

N 3. The machine tool industry

392 There were forty-five machine shops in Shensi, six in
S Kansu, and three in Sinkiang. The more important ones are as
• [392] follows:

1. Hsi-ching Machine Factory, Sian, which was built around 1910 and equipped with fifty-five tool-making machines such as lathe, planing, drilling and pressing machines. Its annual capacity was as follows: four lathe, three water-pumping machines, ten iron looms, five cotton extracting machines, twenty ginning machines, five printing machines, and a number of paper-making machines. Besides, it also accepted orders for the repair of machinery and weapons of war.

2. Hsi-ching Machine Repairing Factory, Sian, the main job of which was to make auto parts. Its monthly output was 90 pistons, 2,500 piston rings and 180 gears, enough for the maintenance of eighty trucks.

3. An iron works, operated by the army, which turned out some twenty looms per month, and also basic machine tools.

4. The Northwest Machine Factory, which had more than eighty basic machine tools, such as lathe, planing machine, drilling machine, etc., was perhaps the largest machine shop in the Northwest, and its main task was to make looms and parts for the textile industry.

4 Sinkiang

Industrial development in Sinkiang is perhaps the fastest in the entire Northwest. As early as 1950, four Sino-Soviet joint-stock companies were established in Urumchi, of which three were industrial plants. They were: (1) Sino-Soviet Non-ferrous Metals Company, (2) Sino-Soviet Rare Metals Company, (3) Sino-Soviet Petroleum Company and (4) Sino- Soviet Airlines. All the Soviet stocks were reportedly transferred to China at the end of 1954, but the Soviet technicians have remained there to help train the Chinese workers.

After the Communists took over, the Sinkiang Petroleum Company has been greatly expanded. Its crude oil output in 1955 is said to have been sixty-three percent higher than in 1954, and deep testing wells were being sunk in five new districts in the Gobi Desert to investigate their oil reserves. The five districts are located in the Turfan and Dzungaria Basins in the Sinkiang-Uighur Autonomous Region.

Another important industrial plant in Sinkiang is the July First Cotton Mill, which began production in 1952. In early 1955, 16,500 spindles and 600 looms were added, which will double the mill's cloth output. The total number of spindles was then over 30,000 and of looms, one thousand. This is the first modern textile mill built in Sinkiang, and it supplies the thirteen nationalities there with a rich variety of fabrics manufactured from the cotton grown in the province itself.

According to the province's initial plans, the investment in capital construction during 1955 is to be increased by over sixty percent as compared with 1954. A total of twelve construction jobs are to be newly built or rebuilt. Preparations are under way for these works. Among the new projects are a modern cement factory, a sulphuric acid factory, a small hydraulic power plant and an oil pressing mill. The cement factory was expected to have its first stage of construction completed in 1956. When completed, this factory will save the state a total of ten million yuan each year in the cost of transporting cement from China Proper. When the sulphuric acid factory starts production, it will supply all the raw material needed for printing and dyeing works by the July First Cotton Mill.

The eight units to be rebuilt in 1955 include the Liu-tao-wan Colliery, the Sinkiang Machine Works, the Ceramic Factory, and the First Cement Factory. When the underground tunnel of the Liu-tao-wan Colliery is rebuilt, it will be possible to produce more coal for the industries and local residents of Urumchi. The output of modern farming tools will be increased when the Sinkiang Machine Works is rebuilt. After a set of automatic equipment is added to the glass workshop of the Ceramic Factory, there will be nineteen additional kinds of new products to supply the market.

S
392 Five tractor repair works were under construction in 1955.
493 Each plant will have sixteen or fifteen mechanized worships. When completed, they will be able to repair as many as 475 tractors and combine harvesters each year in addition to making other farm tools and spare parts.

S
329 There are scattered reports on other industrial developments
398 in Sinkiang, such as: (1) the August First Iron and Steel Plant,
399 (2) the October Motor Car Repair and Assembly Shop, (3) the
256 Urumchi Automatic Electric Plant, (4) the modernized August
288 First Flour Mill, (5) the Khotan Silk Factory, (6) Houcheng
399 Airplane Manufacturing Factory, and (7) more than a dozen
230 animal products processing plants, which process skins, furs
439 and intestines for the purpose of exporting them to the Soviet Union. But detailed information on these projects is not available.

N
S 5. Handicrafts.

121 The foregoing analysis concerns itself with the development
178 of modern industries in the Northwest under the Communist
463 regime. But handicrafts still play a very important role in this
N area as they do in other parts of the country. According to a
463 1951 report, the main handicrafts in the Northwest were as follows:

N
S (1) Cotton cloth. A side line of the peasant, it was produced
[286] practically everywhere in the area. However, the more important producing districts are: 1. Sian, Paochi, in Shensi, 2. Tien-shui, Ho-hsi and Min-chin in Kansu, and 3. Turfan, toqsun and
S Aqsu in Sinkiang. In terms of quantities, the total annual output
N in Shensi is approximately 3,779,670 pieces; in Kansu, 3,505,760
[433] pieces; in Sinkiang, 4,400,000 pieces.

N
S (2) Pottery. The annual output of pottery in the Northwest
[323] amounts to over 4,000,000 pieces. Of that amount Shensi produces
[433] more than 3,000,000 pieces, Kansu, 500,000, Ninghsia, 200,000, and Sinkiang, 50,000. The more famous pottery-producing districts are: 1. Huang-pao-chen and Chen-lu-chen in Tung-chuan, Shensi, which have been famous since the Sung Dynasty, 2. Yao-kai in Yung-teng, Kansu, 3. Ah-kan-chen, Lanchou, Kansu, and An-kou-yao, Hua-ting, Kansu. The production consists mainly of pots, bowls, tea-pots, plates and tea-cups.

N
S (3) Paper. While paper is manufactured in many places in this
463 area, the more important paper-producing districts are: 1. Nan-
289 cheng (Han-chung), Shensi, 2. Khotan, Sinkiang, 3. K'ang-cheng and Tien-shui, Kansu, and 4. Ying-chuan, Ninghsia. The main varieties are as follows:

(a) The "rough-edge" paper. Usually used as a writing paper,
N it is produced and consumed mainly in Shensi. The annual output
[433] is about 192,490 bundles.

(b) The "Flax paper." It may be made of white or black flax,